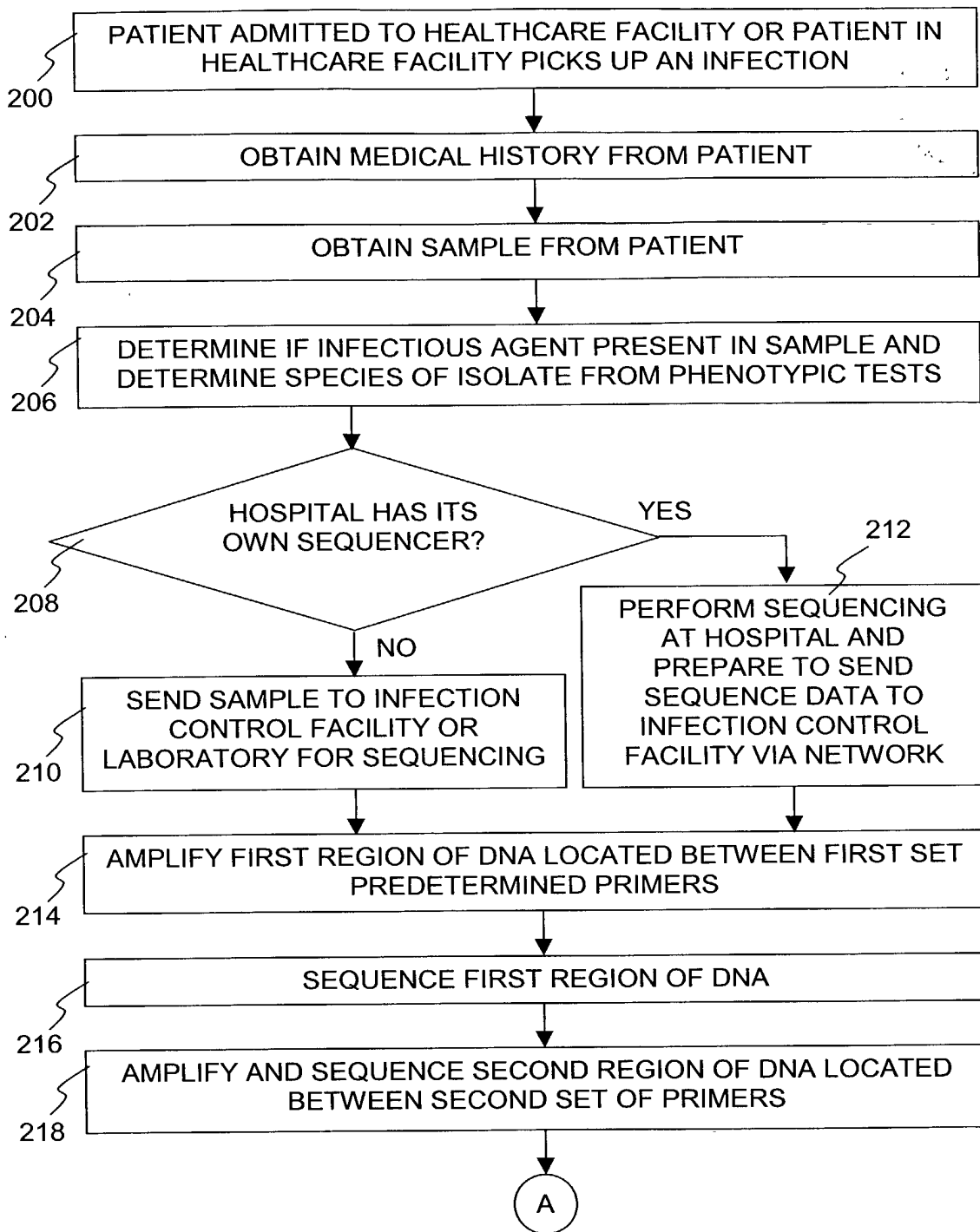
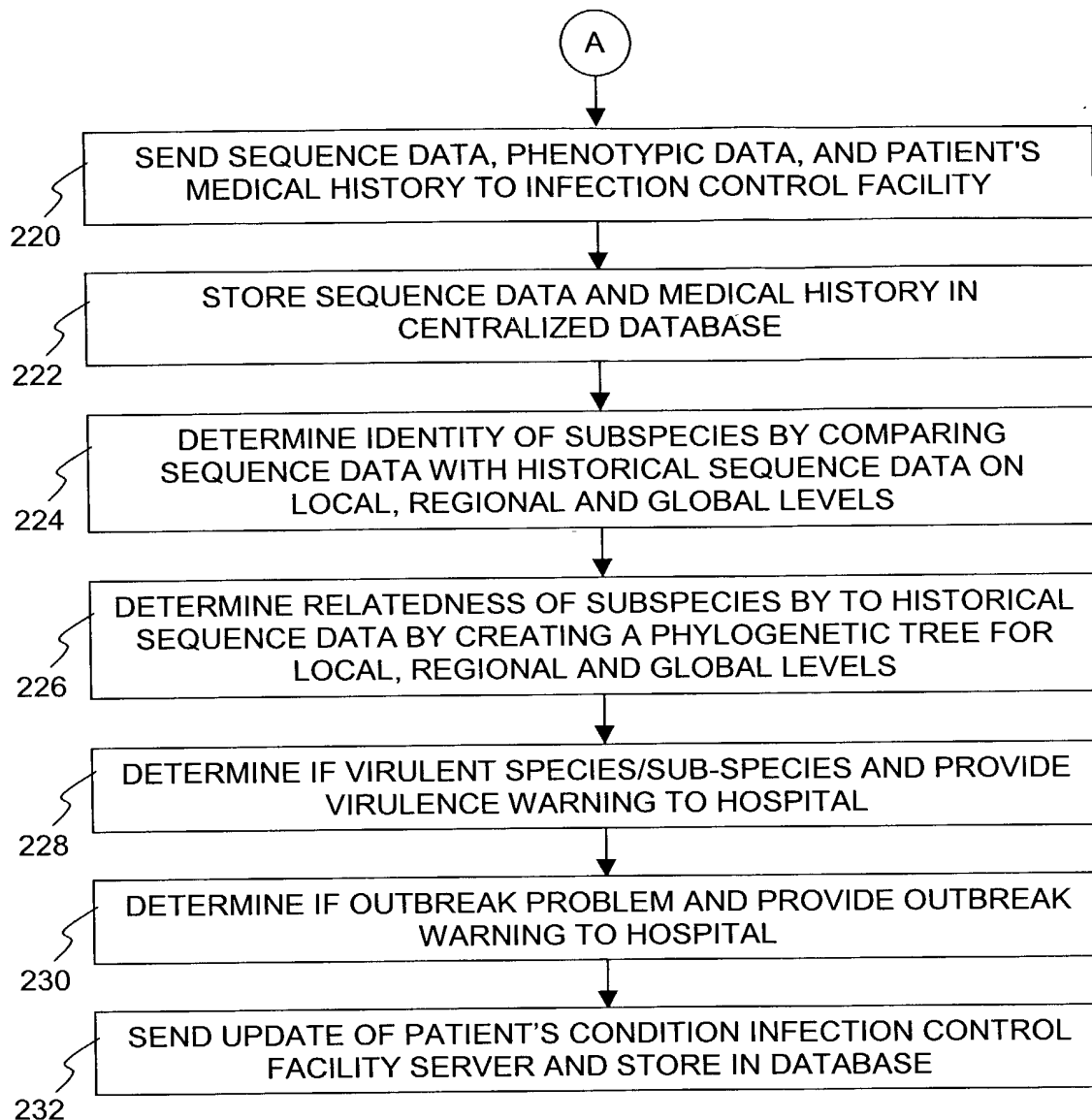


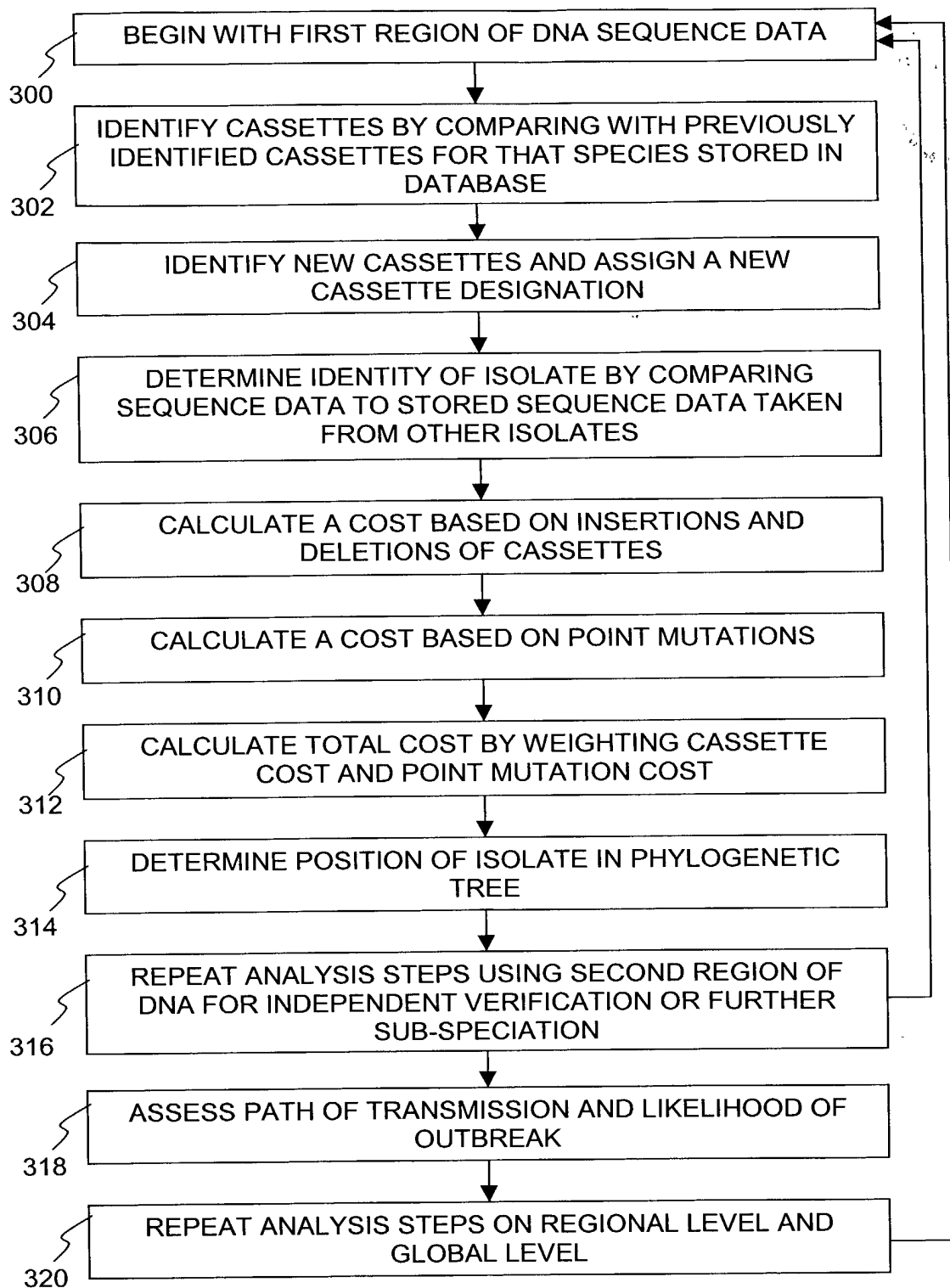
**FIG. 1**

40073255, 042302



**FIG. 2A**

**FIG. 2B**

**FIG. 3**

400

T	GAGGAAGACAACAAAAACCTGGT
A	AAAGAAGACAACAAAAACCTGGC
B	AAAGAAGACAACAAAAACCTGGT
E	AAAGAAGACAACAACAAACCTGGT
G	AAAGAAGACAACAACAAGCCTGGT
D	AAAGAAGACAACAACAAACCTGGC
J	AAAGAAGACGGCAACAAACCTGGC
K	AAAGAAGACGGCAACAAACCTGGT
M	AAAGAAGACGGCAACAAGCCTGGT

FIG. 4A

404

GAGGAAGACAACAAAAACCTGGTAAAGAAGACGGCAACAAACCTGGCAAAGAA  
 GACGGCAACAAGCCTGGTAAAGAAGACAACAACAAACCTGGTAAAGAAGACGGC  
 AACAAAGCCTGGTAAAGAAGACAACAACAAACCTGGCAAAGAAGACGGCAACAAG  
 CCTGGTAAAGAAGACAACAACAAGCCTGGTAAAGAAGACGGCAACAAGCCTGGT  
 AAAGAAGACGGCAACAAACCTGGT

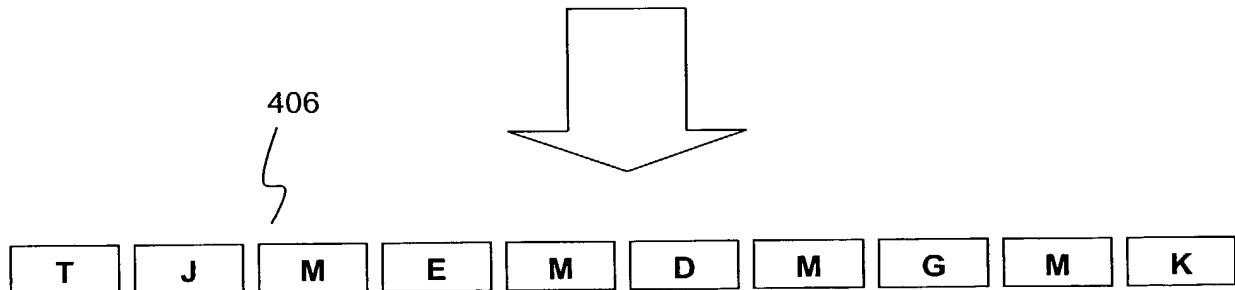


FIG. 4B

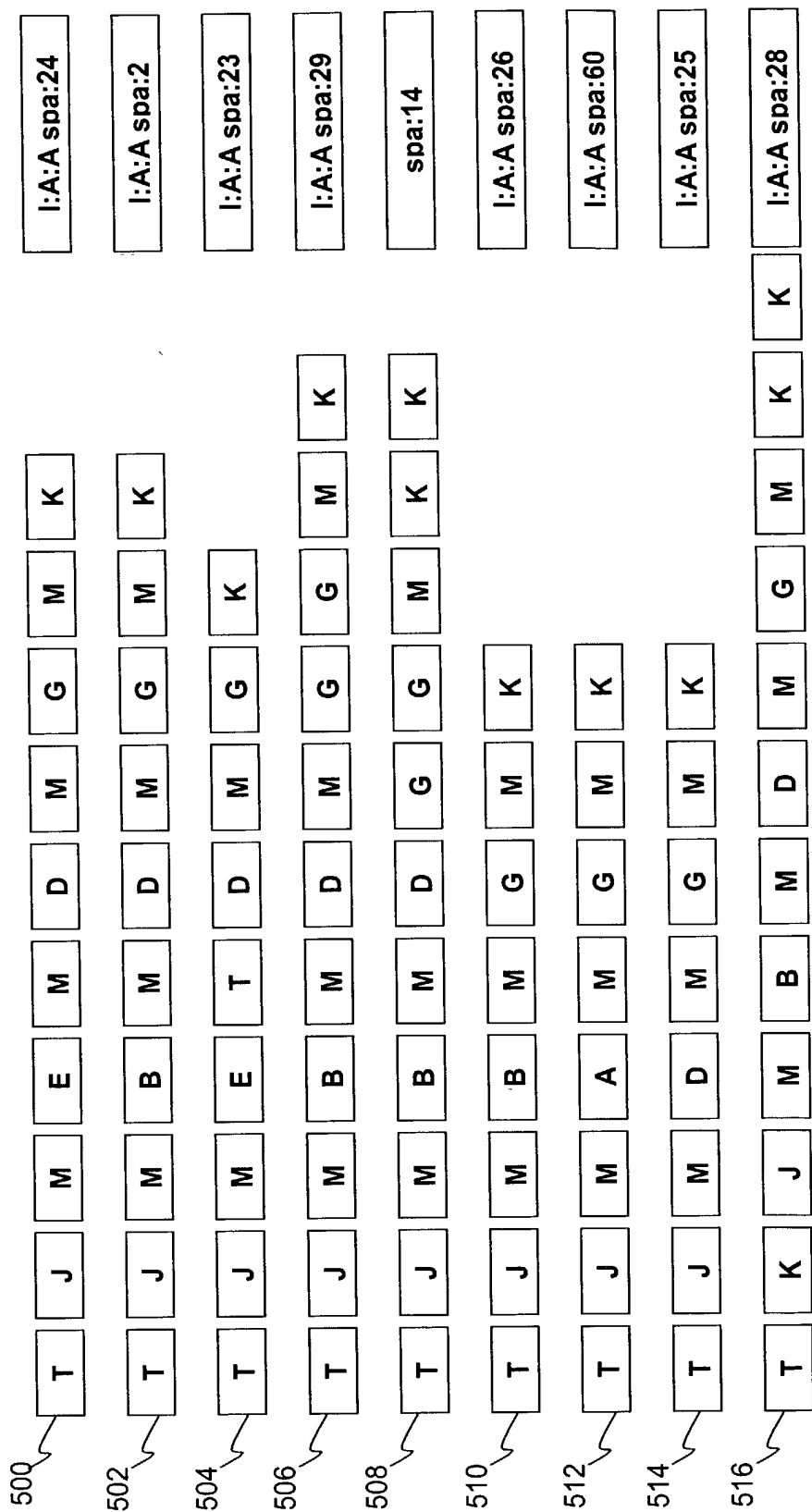
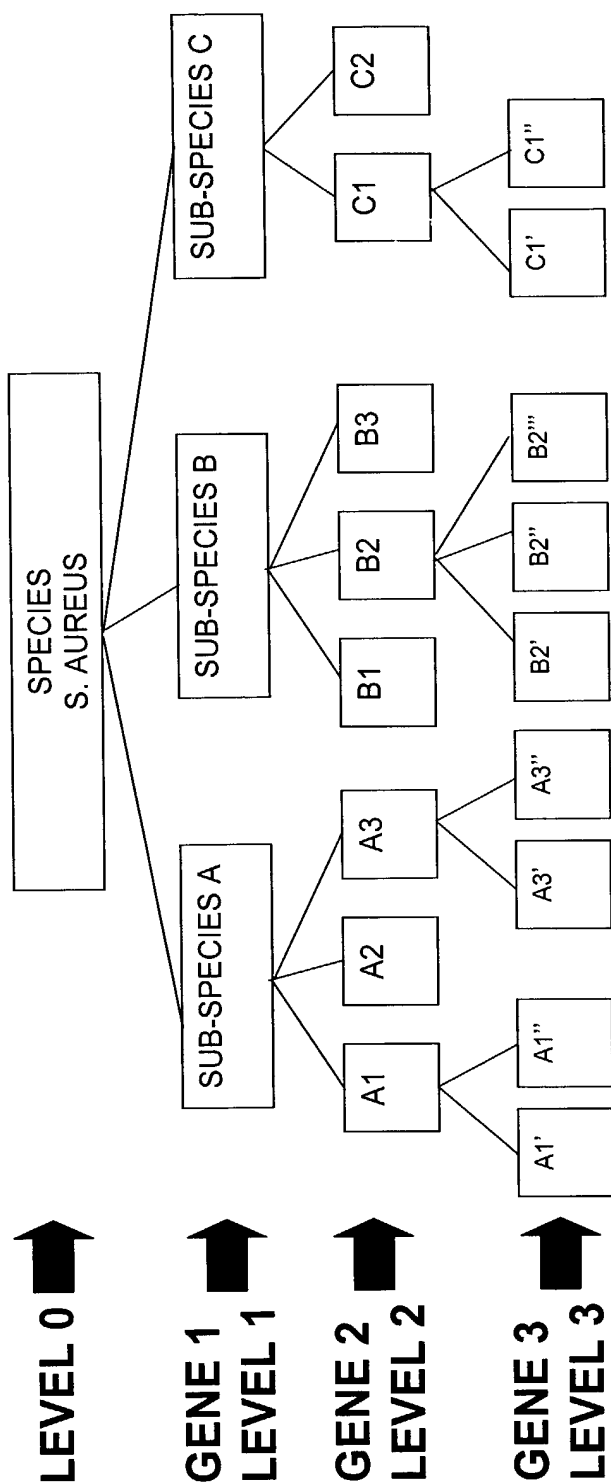


FIG. 5



**FIG. 6**

SPECIES	S. aureus	S. aureus	
SUBSPECIES	A1'	B7"	
SEQ REGION 1	ATTCATAGAT...		
SEQ REGION 2	CGTACTATCC...		
SEQ REGION 3	ATTCGTTATA...		
REGION 1 PRIMERS			
REGION 2 PRIMERS			
REGION 3 PRIMERS			
REPEATS REGION 1	TKJMP..		
REPEATS REGION 2	ABABA		
REPEATS REGION 3	TYYT		
DATE	June 5, 2000		
PATIENT MEDICAL HISTORY	Hospitalized in New York Hospital, June 2000 for 3 weeks, heart surgery...		
PATIENT MEDICAL UPDATE INFO	Patient hospitalized 3 weeks for infection and released....	Patient died due to infection after two weeks...	
LOCATION	Mt. Sinai Hospital, Toronto, Burn Ward	New York City Hospital, ICU	
PHAGE TTYPE			

**FIG. 7A**

S. AUREUS			
SEQ REGION	REPEAT 1	REPEAT 2	REPEAT 3
PROTEIN A X <sub>R</sub>	AATTCGCCTAGG..	AATTCCTCCTAGG..	TAGGCCGT...
REGION 2	TTAAAGGCCTGA..	GGTTCCAATAAT..	GGTTAACC..
REGION 3			

**FIG. 7B**



SEQ ID NO 37

TTTTCTTGGCAATTTTGGTCGTATTATCCGCTTTTTTGAAGTCTTCTGACGATTCTTGATTTGTCTGTATCTGTTT  
 AGTTGCTTGGTTTTCTGCTACTGATTCCCTTTGTTTGAAGTCTTCTGACGATTCTTGATTTGTCTGTATCTGTTT  
 TAGGATCTTGATTAGACTCTACCGCGTAAATGACA GAATTTGGCCTTTGCTTTGGCTACTTTTCGTTTACAGTGCTT  
 GGGGTGCTACTCTCACTTGTATTGTTGGTTGCGCTGGTTGTAAGTCTTCTGACGATTCTTGATTTGTCTGTATCTGTTT  
 ACTGGTTGTACTTGGTGTGTTGCTTTCACTTTGTAAGTCTTCTGACGATTCTTGATTTGTCTGTATCTGTTT  
 TACTACTGGTTTCGCTGGTTGTGCTTGGCGTGTGCTTTCACTCGTACTACTGCTCTCACTTGTCTGCTTGGCGTG  
 CTGCTTTTCGCTTGTATTACTGGTTTCACTTGTCTGCTTGAAGTCTTCTGACGATTCTTGATTTGTCTGTATCTGTTT  
 CGTGGCTTGGCGTGCTGCTTTTCGCTGGTACTACTGCTTTCACTTGTCTGCTTGAAGTCTTCTGACGATTCTTGATTTGTCTGTATCTGTTT  
 TGGTTTCGCTAGTTGTACTTGGTGTGTTGCTTTCACTTTGTAAGTCTTCTGACGATTCTTGATTTGTCTGTATCTGTTT  
 TCGCTTGTATTACTGGTTTCACTTGGTTGTGCTTGGCGTGTGCTTTCACTCGTACTACTGCTCTCACTTGTCTGCTTGGCGTG  
 TGAGGTGCTGCTTTTCGCTTGTATTACTGGTTTCACTTGGTTGTGCTTGAAGTCTTCTGACGATTCTTGATTTGTCTGTATCTGTTT  
 TCTCTGTTGATTTTTCACTAACAGAAGTAA CGCCGTTTTATGGTTTGTGTTAATTGATTAATACGCTTTTTGTGCA  
 TCTGCAGGCGTTTTAAAGCCACCAAGTGTGGCTCTAATAATCTTCATCTGACCAAGCAAGCAGTTGTTGTAAGTCT  
 CTTAGAGCTTCCTTCGCCAGTTGTTGTATCTAATAAGGCTTCTTGCATGGCTTGCCAAGAGTCTTTGGT

Fig. 8A

SEQ ID NO 38

GTGCTTGGGGTGCTACTCTCACTTGTATTGTTGGTTGCGCTGGTT SEQ ID NO 24  
 GTACTTGAAGCACTACTTTTCGCTGGTACTACTTGTTTTACTGGTT SEQ ID NO 25  
 GTACTTGGTGTGTTGCTTTCACTTGTATTGCTTGTTCCTTGTGTC SEQ ID NO 26  
 GTACTTGAAGTACTACTTTTCGCTGGTACTACTGGTTTCGCTGGTT SEQ ID NO 27  
 GTGCTTGGCGTGCTGCTTTTCGCTGGTACTACTGCTCTCACTTGTGTC SEQ ID NO 28  
 GTGCTTGGCGTGCTGCTTTTCGCTGGTACTACTGGTTTCCTTGTGTC SEQ ID NO 29  
 GTGCTTGAAGTGTGCTTTTCGCTGGTACTACTGCTCTCACTTGTGTC SEQ ID NO 30  
 GTGCTTGGCGTGCTGCTTTTCGCTGGTACTACTGCTTTCACTTGTGTC SEQ ID NO 31  
 GTGCTTGAAGTACTACTTTTCGCTGGTATTACTGGTTTCGCTAGTT SEQ ID NO 32  
 GTACTTGGTGTGTTGCTTTCACTTGTATTGCTTGTTCCTTGTGTC SEQ ID NO 33  
 GTGCTTGAAGTGTGCTTTTCGCTGGTATTACTGGTTTACTGGTT SEQ ID NO 34  
 GTACTTGAAGTGTGCTTTTCGCTGGTATTACTGGTTTCACTGGTT SEQ ID NO 35  
 GTGCTTGAAGTGTGCTTTTCGCTGGTATTACTGGTTTCACTGGTT SEQ ID NO 36

SEQ ID NO. 23

Fig. 8B

MTEFWPLLWLLSFT  
 VLGVLVSLVLLVALV SEQ ID NO 39  
 VLEALLSLVLLVLLV SEQ ID NO 40  
**VLGVLLSFVLLVSLV** SEQ ID NO 41  
 VLEVLLSLVLLVSLV SEQ ID NO 42  
 VLGVLVSLVLLVSLV SEQ ID NO 43  
 VLGVLVSLVLLVSLV  
 VLEVLLSLVLLVSLV SEQ ID NO 44  
 VLGVLVSLVLLVSLV SEQ ID NO 45  
 VLGVLVSLVLLVSLV  
 VLGVLVSLVLLVSLV  
 VLEVLLSLVLLVLLV SEQ ID NO 46  
 VLGVLVSLVLLVSLV SEQ ID NO 47  
**VLEVLLSLVLLVSLV**  
 VLEVLLSLVLLVSV SEQ ID NO 48  
 DFSTNRSNAVFMVCVN

Fig. 8C

SEQ ID NO 51

ATGTTCCAGCCCCTATTAGACGCTTATACAGACAGCACCCGTTTAGATGAAACCGATTATAAGCCCCCATTTAAATAT  
AGCCCTAGCCAATTGGTGGCCTTTGGATAAAAAGAGAAAAGCAAAGGGTTTAGGCGTTTTATCTTGTATTTTCATCTTAA  
GCCAACGCTACACAATCACCCCTCCACCAAAAACCTAACGAACCCCTCCGATCTTGTCTTTGGCAGTCCTATTGGATCA  
GCCAGAAAAATCCTATCCTATCAAAACACTAAAAGGGTGTTTTACACCGGTGAAAATGAAGTCCCTAATTTCAATCT  
CTTTGATTACGCCATAGGCTTTGATGAATTGGACTTTAGAGATCGTTATTTGAGAATGCCTTTATATTACGCTAGCT  
TGCATTATAAAGCCGAGAGCGTGAATGACACCACCGCGCCCTACAAACTCAAAGACAACAGCCTTTATGCTTTAAAA  
AAGCCCTCCCATCATTTTAAAGAAAACCAACCTAATTTATGCGCAGTAGTGAATGATGAGAGCGATCTTTGAAAAG  
AGGGTTTTCGAGCTTTGTTCGCGAGCAACCCTAACGCTCCTATAAGGAACGCTTTCTATGACGCTTTAAATTCTATTG  
AGCCAGTTTACTGGGGGAGGGAGCGTGAAAAACACTTTAGGCTATAACGTCAAAAACAAGAGCGAGTTTTTAAGCCAA  
TACAAATTCAATCTGTGTTTGAAGAACTCAAGGCTATGGCTATGTAAGTGAAGAAATCATTGACGCTTATTTTCAG  
CCACACCATTCCCATTATTTGGGGGAGTCCTAGCGTGCGGAAAGACTTTAACCCCTAAGAGTTTTGTGACGTTTGTG  
ATTTTAAAAACTTTGATGAAGCGATTGATTACGTGAGATACCTTCACACGCACCCAAACGCTTATTTAGACATGCTC  
TATGAAAACCCCTTTAAACACCCTTGATGGGAAAGCTTACTTTTACCAAAATTTGAGTTTTAAAAAATCCTAGATTT  
TTTTAAACGATTTTAGAAAACGACACGATCTATCACGATAACCCCTTTCATTTTCTATCGCGATTTGAATGAGCCTT  
TAGTAGCTATTGATGATTTGAGGGTTAATTATGATGATTTGAGGGTTAATTATGATGATTTGAGGGTTAATTATGAT  
GATTTGAGGGTTAATTATGATGATTTGAGGGTTAATTATGATGATTTGAGGGTTAATTATGATGATTTGAGGGTTAA  
TTATGATCGCCTTTTACAAAACGCTTCGCCCTTTATTAGAAGCTCTCTCAAAAACACCACTTTTAAATCTATCGCAAAG  
CCTATCAAAAATCCTTACCTTTGTTGCGCACCATAAGGAGATGGGTAAAAAATAA

Fig. 9A

SEQ ID NO 52

SEQ ID NO 59

GATGATTTGAGGGTTAATTAT SEQ ID NO 50  
GATGATTTGAGGGTTAATTAT  
GATGATTTGAGGGTTAATTAT  
GATGATTTGAGGGTTAATTAT  
GATGATTTGAGGGTTAATTAT  
GATGATTTGAGGGTTAATTAT  
GATGATTTGAGGGTTAATTAT

Fig. 9B

DLRVNYD SEQ ID NO 53  
DLRVNYD  
DLRVNYD  
DLRVNYD  
DLRVNYD  
DLRVNYD  
DLRVNYD

Fig. 9C

SEQ ID NO 54

AATAATGAGAATGTTGTACGTTATGGTGGTGGAAAGTGCTGATGGTGATTCAGCAGTAAATCCGAAAGACCCAACTCC  
 AGGGCCGCGCGTTGAC  
 CCAGAACCAAGTCCAGACCCAGAACCAGAACCAACG  
 CCAGATCCAGAACCAAGTCCAGACCCAGAACCAGGAA  
 CCAAGCCCGACCCGGATCCG  
 GATTCGGATTTCAGACAGT SEQ ID NO 55  
 GACTCAGGCTCAGACAGC SEQ ID NO 56  
 GACTCAGGTTTCAGATAGC SEQ ID NO 57  
 GACTCAGAATCAGATAGC SEQ ID NO 58  
 GATTCGGATTTCAGACAGT  
 GATTCAGATTTCAGACAGC SEQ ID NO 59  
 GACTCAGAATCAGATAGC  
 GATTCAGAATCAGATAGC SEQ ID NO 60  
 GACTCAGATTTCAGATAGC SEQ ID NO 61  
 GATTCAGATTTCAGATAGC SEQ ID NO 62  
 GATTCAGATTTCAGATAGC  
 GATTCGGATTTCAGACAGT  
 GATTCAGATTTCAGACAGC  
 GACTCAGAATCAGATAGC  
 GACTCAGAATCAGATAGT SEQ ID NO 63  
 GAGTCAGATTTCAGACAGT SEQ ID NO 64  
 GACTCGGACTCAGACAGT SEQ ID NO 65  
 GATTCAGACTCAGATAGC SEQ ID NO 66  
 GATTCAGACTCAGATAGC  
 GATTCAGATTTCAGACAGC  
 GACTCAGATTTCAGACAGC SEQ ID NO 67  
 GACTCAGACTCAGATAGC SEQ ID NO 68  
 GACTCAGACTCAGACAGC SEQ ID NO 69  
 GACTCAGATTTCAGATAGC  
 GATTCAGACTCAGACAGC SEQ ID NO 70  
 GACTCAGACTCAGACAGC  
 GACTCAGACTCAGATAGC  
 GACTCAGATTTCAGATAGC  
 GATTCAGACTCAGACAGC  
 GACTCAGATTTCAGATAGC  
 GATTCGGACTCAGACAGC SEQ ID NO 71  
 GATTCAGATTTCAGACAGC  
 GACTCAGACTCGGATAGC SEQ ID NO 72  
 GATTCAGATTTCAGATAGC  
 GATTCGGATTTCAGACAGT  
 GATTCAGATTTCAGACAGC  
 GACTCAGACTCGGATAGC  
 GACTCAGACTCAGACAGC  
 GATTCAGACTCAGATAGC  
 GACTCAGACTCGGATAGC  
 GACTCAGACTCAGATAGC  
 GACTCGGATTTCAGATAGC SEQ ID NO 73  
 GACTCAGACTCAGATAGT SEQ ID NO 74  
 GACTCCGATTCAAGAGTT SEQ ID NO 75  
 ACACCACCAATAATGAACAGAAAACACCAATCAAATCCTAAAGGTGAAGTAAACCATTCTAATAAGGTATCAAAACA  
 ACACAAAACATGATGCTTTACCA

Fig. 10B

Repeat pattern isolate 1:

1-2-3-4-1-5-4-6-7-8-8-1-5-4-9-10-11-12-12-5-13-14-15-7-16-15-14-7-16-7-17-5-18-8-1-5-18-15-12-18-19-20-21

Fig. 10E

TCAGCAGTAAATCCGAAAGACCCAACTCCAGGGCCGCCGGTTGACCCAGAACCAAGTCCAGACCCAGAACCAGAACC  
AACGCCAGATCCAGAACCAAGTCCAGACCCAGAACCAGGAACCAAGCCCAGACCCGGATCCG  
GATTCGGATTTCAGACAGT  
GACTCAGGCTCAGACAGC  
GACTCAGGTTTCAGATAGC  
GACTCAGAATCAGATAGC  
GATTCGGATTTCAGACAGT  
GATTCAGATTTCAGACAGC  
GACTCAGAATCAGATAGC  
GATTCAGAATCAGATAGC  
GACTCAGATTTCAGATAGC  
GATTCAGATTTCAGATAGC  
GATTCAGAATCAGATAGC  
GATTCGGATTTCAGACAGT  
GATTCAGATTTCAGACAGC  
GACTCAGAATCAGATAGC  
GACTCAGAATCAGATAGT  
GAGTCAGATTTCAGACAGT  
GACTCGGACTCAGACAGT  
GATTCAGACTCAGATAGC  
GATTCAGACTCAGATAGC  
GATTCAGACTCAGACAGC  
GATTCAGATTTCAGACAGC  
GACTCAGAATCAGACAGC  
GACTCAGACTCAGATAGC  
GACTCAGACTCAGACAGC  
GACTCAGATTTCAGATAGC  
GATTCAGACTCAGACAGC  
GACTCAGACTCAGACAGC  
GACTCAGACTCAGATAGC  
GATTCAGACTCAGACAGC  
GACTCAGATTTCAGATAGC  
GATTCGGACTCAGACAGC  
GATTCAGATTTCAGACAGC  
GACTCAGACTCGGATAGC  
GATTCAGATTTCAGACAGC  
GACTCAGACTCGGATAGC  
GACTCGGATTTCAGATAGT  
GACTCCGATTCAAGAGTT

SEQ ID NO 79

SEQ ID NO 80

ACACCACCAAATAATGAACAGAAAGCACCATCAAATCCTAAAGGTGAAGTAAACCATTCTAATAAGGTATCAAAACA  
ACACAAAACCTGATGCTTTACCAGAAACAGGAGATAAGAGCGAAAAACACAAATGCAACTTTATTTGGTGCAATG

Fig. 10C

Repeat pattern isolate 2:

1-2-3-4-1-5-4-6-7-8-6-1-5-4-9-10-11-12-12-16-5-22-14-15-7-16-15-14-16-7-17-5-18-5-18-23-21

Fig. 10F